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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/688,837 | 10/17/2000 | Shusuke Yamamoto | 001358 | 1853 |

7590 12/20/2002

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EXAMINER

FERGUSON, MICHAEL P

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3679

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/688,837

Applicant(s)

YAMAMOTO ET AL.

Examiner

Michael P. Ferguson

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (USPN 5,520,269) in view of Uramoto et al. (USPN 4,642,011).

As to claim 6, Yamamoto et al. discloses a pin connection structure for use in a floating type brake disc assembly having:

a hub **2**;

an annular disc **1** which is concentrically disposed around the hub with a clearance therebetween;

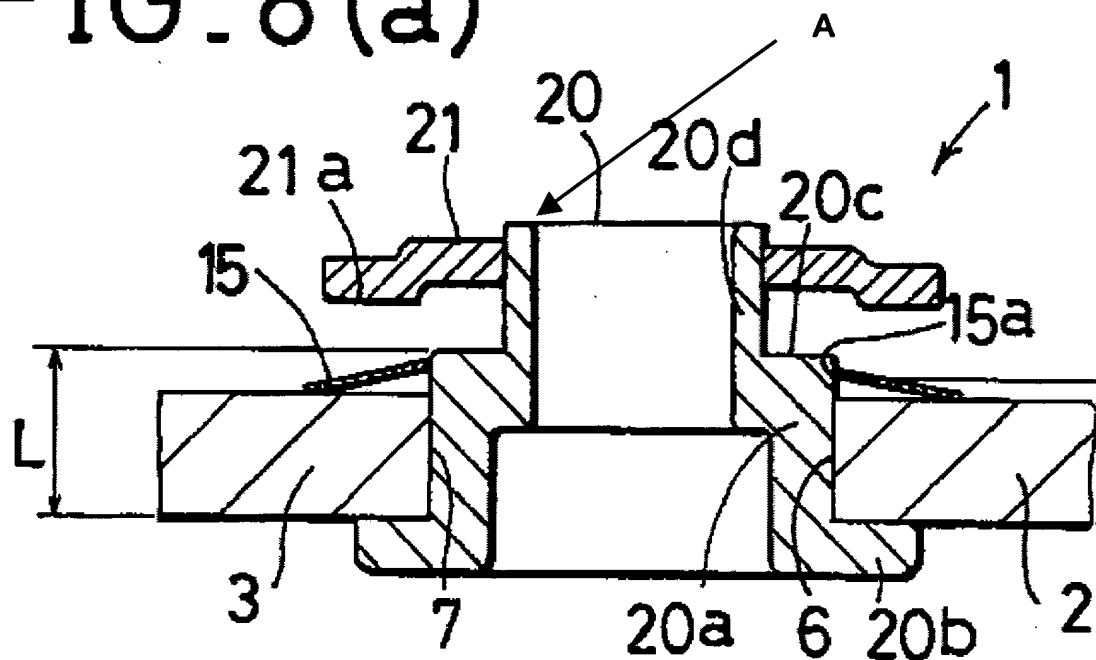
the hub and the disc having plural sets of semicircular connecting dents **6, 7** opening toward the clearance to thereby form respective inserting holes;

a hollow pin **20** inserted into each of the inserting holes with a washer **21** fitted on an end portion **20d** of the hollow pin which is subsequently caulked radially outward for fixing the washer in position; and

wherein the hollow pin is formed into a convex shape **A** (Figure 8(a) reprinted below with annotations) in a part of an inner periphery of the end portion (Figures 8(a) and 8(b)).

The applicant is reminded that the drawings are a part of the disclosure of the patent. While it is not required for every element to be described within the written disclosure, elements shown within the drawings are considered disclosed within the disclosure of the patent. Accordingly, convex shape **A** in the inner periphery of the end portion **20d** of hollow pin **20** is considered disclosed by Yamamoto et al. (USPN 5,520,269).

FIG. 8(a)



Yamamoto et al. fails to disclose a pin connection structure having a hollow pin made of metal having a surface-treated layer.

Uramoto et al. teaches a fastener made of metal having a surface-treated layer for preventing rust and corrosion of the fastener (column 1 line 62- column 2 line 23, column 5 lines 25- 61; column 6 lines 54- 68; and Table 7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a pin connection as disclosed by Yamamoto et al. to have a hollow pin made of metal having a surface-treated layer as taught by Uramoto et al. to prevent rusting and corrosion of the hollow pin.

The applicant is reminded that process limitations are given no patentable weight in product claims. See MPEP § 2113. "The patentability of a product does not depend on its method of production. " In re Thorpe, 777 F.2d 695,698,USPQ 964,966 (Fed.Cir.1985).

As to claim 7, Uramoto et al. teaches a fastener made of aluminum alloy metal (column 1 line 62- column 2 line 23, column 5 lines 25- 61; column 6 lines 54- 68; and Table 7).

As to claim 8, Uramoto et al. teaches a fastener made of ferrous material (column 1 line 62- column 2 line 23, column 5 lines 25- 61; column 6 lines 54- 68; and Table 7).

As to claim 9, Uramoto et al. teaches a fastener having a surface-treated layer being an oxide corrosion-resistant film (column 1 line 62- column 2 line 23, column 5 lines 25- 61; column 6 lines 54- 68; and Table 7).

As to claim 10, Uramoto et al. teaches a fastener having a surface-treated layer being chromium plating and nickel plating (column 1 line 62- column 2 line 23, column 5 lines 25- 61; column 6 lines 54- 68; and Table 7).

Response to Arguments

3. Applicant's arguments filed September 26, 2002 have been fully considered but they are not persuasive.

As to claim 6, the attorney argues that Yamamoto et al. does not disclose a pin connection structure having *a hollow pin which is formed into a convex shape in an inner periphery of the end portion* as claimed in independent claim 6 as amended.

The examiner does not agree. As to claim 6, Yamamoto et al. discloses a pin connection structure for use in a floating type brake disc assembly having a hollow pin is formed into a convex shape **A** in a part of an inner periphery of the end portion (Figures 8(a) and 8(b)).

The applicant is reminded that the drawings are a part of the disclosure of the patent. While it is not required for every element to be described within the written disclosure, elements shown within the drawings are considered disclosed within the disclosure of the patent. Accordingly, convex shape **A** in the inner periphery of the end portion **20d** of hollow pin **20** is considered disclosed by Yamamoto et al. (USPN 5,520,269).

As to claim 6, attorney argues that Uramoto et al. does not teach a metal element having a surface-treated layer, *the metal itself having corrosion resistivity*.

The examiner notes that claim 6 does not claim a metal element having a surface-treated layer, wherein the metal itself has corrosion resistivity. As to claim 6, Uramoto et al. teaches a fastener made of metal having a surface-treated layer for

preventing rust and corrosion of the fastener (column 1 line 62- column 2 line 23, column 5 lines 25- 61; column 6 lines 54- 68; and Table 7).

In response to applicant's argument that the combination of Yamamoto et al. with Uramoto et al. provides no suggestion to motivate one of ordinary skill in the art to combine their teachings, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Furthermore, it is well-known within the art for a hollow pin to be formed into a convex shape in an inner periphery of an end portion of the pin, as shown in Hammond (USPN 5,299,667), Hufnagl et al. (USPN 4,221,041), Worthing (USPN 4,817,264) and Auriol et al. (USPN 5,651,172).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (703)308-8591. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703)308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9326 for regular communications and (703)872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1114.

MPF
December 16, 2002



Lynne H. Browne
Supervisory Patent Examiner
Group Art Unit 3679